

SINKLER (W.)

THE TREATMENT OF ACRO-PARESTHESIA
(NUMBNESS OF THE EXTREMITIES).

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**THE TREATMENT OF ACRO-PARESTHESIA
(NUMBNESS OF THE EXTREMITIES).¹**

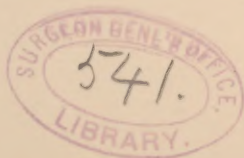
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IN 1884 I read before the College of Physicians of Philadelphia a paper on a form of numbness which occurred principally in the upper extremities; and my observations showed that it was usually met with in women at about the change of life, although it occasionally occurred in men. I regarded it as a vasomotor neurosis, because of the circumstances under which it was most likely to occur, and because it seemed to be one of the annoying symptoms which belonged to the menopause. Dr. James J. Putnam had already described some cases of the same kind, and suggested that the affection was probably due to alteration in the blood-supply of the terminal nerve-branches. Omerod, who had also written on numbness of the extremities, believed the condition to be allied to Raynaud's disease, and probably the result of vascular spasm.

"Waking numbness" is a condition which has been recognized for years, and recently several

¹ Read by title before the Pennsylvania State Medical Society, May 17, 1894.



articles on paresthesia of the extremities have appeared. The view now generally held in regard to this disorder is that it is a form of peripheral neuritis. Collins¹ has recently presented an interesting paper on this subject, and analyzes forty-three cases of the affection. He holds that the trouble is due to defective innervation of the bloodvessels, which causes a low degree of blood-pressure and lack of proper blood-supply to the terminal branches of the peripheral nerves. He thinks that the most striking factor in the etiology of the affection is occupation, as he found that 75 per cent. of his patients were women who did either washing, sewing, scrubbing, or needle-work of some kind; and he believes that bodily fatigue, over-exertion, and poor nourishment are predisposing factors.

Schultze² reports twelve cases of acro-paresthesia, as he calls the affection, and makes an elaborate study of the symptomatology. He thinks the symptoms are all opposed to the theory of peripheral neuritis, but believes that the disease is somewhat analogous to neuralgia. He considers the etiology obscure, and regards manual labor as having but little influence. He admits that many cases occur at about the climacteric, but says that the influence of that period is wholly unknown. He states that he has found treatment not very efficacious; that drugs are of no use, except to relieve pain, when present; but that electricity, warm baths, and warm applications may do some good.

¹ Journal of Mental and Nervous Diseases, August, 1893.

² Deutsche Zeitschrift für Nervenheilkunde, 1893, iii, p. 300.

Friedmann¹ regards the affection as independent and individual, but harmless, notwithstanding its persistency. He also refers to the menstrual period in women as influencing the onset of the disease. He is disposed to ascribe the trouble to general anemia, with a weak circulation, and thinks that there is often some cardiac affection, usually a slight amount of fatty degeneration. He divides the affection into four classes: the acute and the chronic; a form in which the symptoms begin suddenly and are associated with vertigo (this variety is probably due to some brain-lesion); and a fourth class of cases, in which there is a tendency to rheumatic troubles. He is inclined to refer the trouble to two pathologic conditions: passive hyperemia of the extremities and irritation of the peripheral branches of the nerves. In treatment he recommends electricity, tonics, and cardiac stimulants.

Laquer² analyzes eighteen cases in women between thirty-five and forty, and recognizes the features as described by Schultze; but, contrary to that observer, regards the influence of hard work with the hands as being of great importance in an etiologic relation. He regards the affection as a neurosis due to exhaustion.

The observation of a considerable number of cases since 1884 has confirmed the views which I then expressed as to the pathology and etiology of the disease. There is probably in all cases of paresthesia some

¹ Deutsche Zeitschrift für Nervenheilkunde, 1893, iv, p. 450.

² Neurologisches Centralblatt, March 15, 1893.

change in the blood-supply of the peripheral nerves. In those of an intermittent character there is only hyperemia; but in others in which the symptoms are constant, there is, no doubt, a slight but distinct inflammation of the terminal filaments of the peripheral nerves. A patient whose case I have already related¹ illustrates the influence of the menopause in causing paresthesia:

Mrs. Y., forty-one years old, was referred to me by Dr. Oliver P. Rex. Her menstruation had been regular until six months before, when there was a cessation for seven weeks, and then a uterine hemorrhage occurred. An extra-uterine pregnancy was diagnosticated, and at the end of three months celiotomy was performed and a fetus and both ovaries removed. The patient made a good recovery and got up at the end of three weeks. Soon after this she began to have flushes of heat several times a day. Three or four weeks later she had attacks of numbness in the right hand when she awoke from sleep. At first there was only numbness, but later there appeared a sense of prickling and pain, which would awaken her from sleep. In a few days both hands were affected, and they soon became numb all the time. The numbness was most intense in the afternoons, and especially in the distribution of the ulnar nerve. When the woman went to sleep the whole arm became numb and painful, and she was awakened by the sensation. Sleep was, therefore, almost impossible and she walked the floor most of the night. When I saw her this trouble had existed for five weeks; the temperature of the hands was normal, tactile sensation, localization,

¹ "Remote Results of Removal of the Ovaries and Tubes," University Medical Magazine, December, 1891.

and appreciation of compass-points were unchanged ; but the patient was awkward about sewing and the use of her fingers generally.

In this case the premature induction of the menopause by the removal of the ovaries brought on the vasomotor symptoms which belong to that condition when it comes on naturally, and the symptoms were more intense than those met with under ordinary circumstances. Complete relief was afforded by the administration of ergot.

Various writers have suggested different plans of treatment for this form of paresthesia. Putnam recommended strychnin, phosphorus, and potassium bromid, with the use of galvanism. Omerod found potassium bromid useful. Collins believes that there is no specific remedy, but regards prolonged rest, with restorative treatment, the most beneficial therapeutic measure. The use of the faradic current he considers helpful, but he believes a general tonic plan of treatment, with out-door life and change of occupation, of the most importance. In my paper to which I have referred, I stated that the treatment that I had found most useful was the administration of ergot, and that I had used this drug with the belief that the cause of the paresthesia was a hyperemia of the nerve-trunks or of the terminal filaments. As ergot is supposed to cause contraction of the arterioles, it seemed the proper remedy. I also suggested that in some cases there might be congestion of the cervical enlargement of the cord, from the fact that the numbness is often bilateral, and that the attack is most frequently induced by sleep. More extended experience has confirmed

the belief in the utility of ergot in this disease, and I shall cite two illustrative cases :

Mrs. D., thirty-four years old, has always been healthy. Menstruation has always been scanty, and before marriage painful. She has been married twelve years and has had four children. She has had a slight attack of rheumatism, followed by pain in her left side, which becomes weak from over-work. Recently she has had great care and worry in nursing two sick children. Five or six months before coming under observation she began to have a sense of numbness in her shoulders, which extended to the epigastrium, and then appeared in the hands and feet, changing its location from one foot to the other during the day, but becoming much worse at night. There is a continual sense of numbness of varying degree in the fingers and hands. It becomes painful in the early morning, but after use of the hands and arms for a time there is less intense prickling, and she is able to go on with her work. There is no anesthesia, and with the dynamometer the grasp of the right hand is 100, that of the left 90. There is no change in the temperature-sense. The patient was very anemic, and was ordered twenty drops of the tincture of ferric chlorid three times a day, and advised rest and good food. She followed this treatment for two weeks and then reported that she was not so well. She was looking better and was less anemic, but complained of an increase of the numbness in the hands, arms, and feet, and had some dizziness and precordial pain. She took iron in full doses for a month. At the end of that time the paresthesia was no better, if anything, worse; and she was then ordered grs. xxx of the fluid extract of ergot, three times a day. In two weeks she reported that she was very much

better, having taken the half-dram doses of ergot steadily. She was now ordered to return to the iron, and took this for two weeks, when she again reported that the numbness in her hands had increased. Ergot was once more prescribed, with immediate relief to the symptoms, and she took this remedy at intervals for some weeks. There was a return of the numbness several times, but it was always relieved by the administration of ergot.

Mrs. B., thirty-three years old, has two children, and has always enjoyed excellent health, with the exception of an attack of chorea, which lasted from the twelfth until the fifteenth year, since which time she has always been somewhat "nervous." She is a very healthy-looking woman, with bright color, and is in good flesh. The urine was found to have a specific gravity of 1018, to be slightly acid, and contained neither albumin nor sugar. She has had some dysmenorrhea since marriage, but menstruation has otherwise been regular and normal. About three months before coming under observation she began to have numbness in the left hand on rising in the morning. This soon extended to the right hand, and then became painful. The numbness and painful prickling soon extended to the shoulders. In a few days sleep became disturbed, and soon the numbness was so great that she would be awakened by it soon after falling asleep, so that for several weeks her rest was greatly broken. Within a few weeks the numbness extended to the feet and legs during sleep. There is no loss of sensation, and the patient is able to use the hands in sewing and in performing other acts. She was ordered a pill of ergotin, grs. ii, and the extract of cannabis indica, gr. $\frac{1}{4}$, three times a day. In three or four days she reported very marked relief from the numbness, and the dose of ergotin increased to grs. vi *ter in die*.

In two weeks she stated that she was very much better, that the numbness had left all of the extremities except the left arm, and it was here very much less. She was then directed to withhold the ergotin and to take lithia-water freely. She remained free from the numbness for two weeks, when she had a sharp attack, chiefly affecting the fingers and hands. She was then ordered to renew the pills of ergotin and cannabis indica, and in a few days reported complete relief. She was still nervous, and was given a pill of iron valerianate, quinin, and strychnin, and has remained free from any numbness up to the last report that I have had of the case.

While ergot relieves very quickly the numbness and painful formication in these cases of paresthesia, it is always necessary to use additional means for the improvement of the general nutrition. Massage is of great value, and general faradization is also useful. Change of air, and tonic doses of iron, quinin, strychnin, usually effect a cure after the relief of the symptoms by ergot. There are cases of paresthesia which are due to lithemia, and these usually yield to appropriate anti-lithemic remedies.

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